

Appln. No.: 09/894,446

Amendment dated January 23, 2006

Reply to Office Action of September 28, 2005

Reply to Advisory Action of November 22, 2005

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1 (currently amended): A control management system for software controllable devices comprising in combination:

(a) a communication network;

(b) a plurality of software controllable devices coupled to the network wherein each software controllable device has at least one property to be controlled and wherein each software controllable device has an associated control object that exposes the properties of the device to be controlled;

(c) at least one client operatively coupled to the network and having a user interface, the client being capable of changing a value of the property of at least one device via the network; and

(d) an event manager coupled to the network and having stored the property values of each device and the properties to which the client subscribed,

~~wherein the event manager has a client time stamp indicating when the client last queried the event manager for property change information and when polled by the client, the event manager provides the client with an update of any changes to the properties to which the client has subscribed.~~

2 (original): The control management system of claim 1, wherein the event manager has a persistence store container identifying each control object of the devices to be controlled.

3 (original): The control management system of claim 2, wherein each control object in the persistence store has associated parameters selected from the group consisting of an identification of the control object, a name of the control object, a location of the associated device, an exposed properties listing of the associated device, and a property descriptor.

Appln. No.: 09/894,446
Amendment dated January 23, 2006
Reply to Office Action of September 28, 2005
Reply to Advisory Action of November 22, 2005

4 (original): The control management system of claim 3, wherein the property descriptor enumerates the exposed properties of the control object.

5 (original): The control management system of claim 1, wherein the event manager has a custom container identifying each control object based on locations of each of the associated plurality of software controllable devices.

6 (original): The control management system of claim 1, wherein each property stored in the event manager has an associated time stamp indicating when the property last changed value.

7 (canceled)

8 (original): The control management system of claim 1, wherein the client subscribes to at least one controllable property that the client can control and wherein the event manager associates the controllable property with the client.

9 (currently amended): The control management system of claim 1 wherein the event manager has computer-executable instructions for performing the steps of: (i) receiving a polling request from a client for status information regarding at least one property of a device wherein the request provides the-a client time stamp indicating when the client last queried-polled the event manager for property change information; (ii) comparing the-a client time stamp with a time stamp corresponding to when the property that the client requests-polled last changed value; and (iii) if the client time stamp is earlier than the time stamp corresponding to when the property that the client requests last changed value, providing the property value information to the client.

10 (original): The control management system of claim 1, wherein the client communicates with the event manager via eXtensible Markup Language (XML).

11 (original): The control management system of claim 1, wherein the software controllable devices communicate with the event manager via a component object model (COM).

Appln. No.: 09/894,446

Amendment dated January 23, 2006

Reply to Office Action of September 28, 2005

Reply to Advisory Action of November 22, 2005

12 (original): The control management system of claim 11, wherein the client is not COM-enabled.

13 (original): The control management system of claim 1, wherein the software controllable devices communicate with the event manager via a Distributed Component Object Model (DCOM).

14 (original): The control management system of claim 1, wherein the devices are selected from the group consisting of electronics, appliances, furniture, and fixtures.

15-18 (canceled)

19 (currently amended): A method for providing information about at least one device to a client, wherein the device and the client are part of a networked management system, the method comprising the steps of:

- (a) storing, in a central memory coupled to the network, property information for the device;
- (b) receiving change information from the network indicating that a property of the device has changed;
- (c) storing, in the central memory, the change information relating to the property of the device;
- (d) storing, in the central memory, a property time stamp corresponding to the change information indicating when the property of the device changed;
- (e) receiving a polling request for status information from a client regarding the property, wherein the client has a client time stamp that is earlier than the property time stamp; and
- (f) providing the change information to the client via the network responsive to the polling request,
wherein the client has accurate information regarding the device to be controlled.

20 (original): A computer-readable medium having computer-executable instructions for performing the steps recited in claim 19.

21 (currently amended): In a network comprising a plurality of clients, a plurality of software controllable devices, and a computer-readable medium, a distributed system for controlling the devices, comprising in combination:

(a) at least one control object residing in the computer-readable medium accessible to a software controllable device and exposing controllable properties for the respective device, the control object accepting and issuing messages to and from the respective device;

(b) an event manager residing in the computer-readable medium accepting and issuing messages to the control object and storing the exposed controllable properties and property values of the devices; and

(c) a user interface residing in the client adapted to receive property value information from the event manager, and accept and issue control messages to and from the event manager,

wherein the event manager serves as an interface for the client to issue commands to the software controllable devices and to receive updates of any changes to the properties values, and

wherein the event manager has computer-executable instructions for performing the steps of: (i) receiving a polling request from a client for status information regarding at least one property of a device wherein the polling request provides a client time stamp indicating when the client last queried-polled the event manager for property change information; (ii) comparing the client time stamp information with the time stamp corresponding to when the property that the client requests last changed value; and (iii) if the client time stamp is earlier than the time stamp corresponding to when the property that the client requests-polled last changed value, providing the property value information to the client in response to the polling request.

22 (original): The distributed system of claim 21, wherein the event manager has a persistence store container identifying each control object of the devices to be controlled.

Appln. No.: 09/894,446
Amendment dated January 23, 2006
Reply to Office Action of September 28, 2005
Reply to Advisory Action of November 22, 2005

23 (original): The distributed system of claim 22, wherein each control object in the persistence store has associated parameters selected from the group consisting of an identification of the control object, a name of the control object, a location of the associated device, an exposed properties listing of the associated device, and a property descriptor.

24 (previously presented): The distributed system of claim 23, wherein the property descriptor enumerates the exposed properties of the control object.

25 (original): The distributed system of claim 21, wherein the event manager has a custom container identifying each control object based on locations of the associated devices.

26 (original): The distributed system of claim 21, wherein each property stored in the event manager has an associated time stamp indicating when the property last changed value.

27 (canceled)

28 (original): The distributed system of claim 21, wherein the client subscribes to at least one controllable property that the client can control and wherein the event manager associates the controllable property with the client.

29 (canceled)

30 (original): The distributed system of claim 21, wherein the client communicates with the event manager via eXtensible Markup Language (XML).

31 (original): The distributed system of claim 21, wherein the software controllable devices communicate with the event manager via a component object model (COM).

32 (original): The distributed system of claim 31, wherein the client is not COM-enabled.

Appln. No.: 09/894,446

Amendment dated January 23, 2006

Reply to Office Action of September 28, 2005

Reply to Advisory Action of November 22, 2005

33 (original): The distributed system of claim 21, wherein the software controllable devices communicate with the event manager via a Distributed Component Object Model (DCOM).

34 (original): The distributed system of claim 21, wherein the devices are selected from the group consisting of electronics, appliances, furniture, and fixtures.